Institutional Sustainability of Malaysian Homestays: Government Perspective

Ann Selvaranee Balasingam*
Nilai University, Malaysia
annb@nilai.edu.my

Jamil Bojei
Universiti Putra Malaysia

Khairil Wahidin Awang
Universiti Malaysia Kelantan, Malaysia

Salleh Mohd Radzi
Universiti Teknologi MARA, Malaysia

Proposed citation:

Abstract
Institutional sustainability issues within the Malaysian homestays product over the last 30 years include lack of governance and leadership issues. This research intends to test the relationship between three institutional sustainability indicators namely; flexibility, self-organization, and power-sharing against homestay sustainability from the government perspective. The concept of homestay sustainability and stakeholder theory underpins this study. Survey questionnaires were collected from 115 government officials to fill out based on a five-point Likert scale. The sampling strategy is convenience sampling, and the data was analyzed using Partial Least Square Structural Equation Modeling (PLS-SEM) approach. The findings of the study confirm the significant relationship between flexibility, self-organization and power-sharing and homestay sustainability.

Keywords:
Homestay sustainability, institutional dimension, flexibility, self-organization, power-sharing
1 Introduction

The World Economic Forum (WEF) has ranked the Malaysian tourism industry at the 26th position for industry competitiveness in the global tourism industry (WEF, 2017). Meanwhile, the World Travel and Tourism Council (WTTC) ranked Malaysia 27th in tourism industry contribution to Gross Domestic Product (GDP) and 24th in its contribution towards direct employment (WTTC, 2017). Malaysia’s rich cultural resources, price competitiveness, and policy environment that are conducive to tourism development contributed to these sturdy rankings. The products that Malaysia offers the world includes attractive retail, food and beverage, accommodation, local transport, entertainment, domestic airfares and organized tours. In addition, among the attractive accommodation products offered to tourist, the product that is growing in popularity is the Malaysian homestay program. The Malaysian homestays boasts of rural, socio-cultural experiences, unlike others.

Homestays in most countries in the world replicate the concept of a visit to a relatives’ home but at a cost (Di Domencio & Lynch, 2007). Existing homestays globally range from traditional homestays in authentic rural settings to contemporary homestays in metropolitan cities or resort destinations. In developed economies like the United Kingdom, Ireland, and Scotland, a homestay is a commercial home enterprise, where guest pay to stay in the home of the host with much interaction and where public spaces are shared (Kontogeorgopoulos, Churyen, & Duangsaeng, 2013; Lynch, 2005). In the United States of America, Canada, Australia and New Zealand, the homestay targets the international student market. Students are required to learn the language and the culture within their study period (Kontogeorgopoulos et al., 2013; Lynch, 2005) Some homestays in Australia are also farm stays (Kontogeorgopoulos et al., 2013; Lynch, 2005). In Asian countries like Malaysia, Thailand, India, and Nepal, homestays are located in rural villages with the intention to develop the rural economy and promote the culture.

The Malaysian homestays are defined as a place “where tourists stay with the host’s family and experience the everyday way of life of the family in both a direct and indirect manner” (Ministry of Tourism and Culture [MOTAC]) as cited in Ibrahim & Razzaq, 2009, pg. 10). The typical scenario of a homestay package in Malaysia starts with the initial arrival of tourists in the community being greeted by the local school children playing ‘kompong’ (a traditional musical instrument). Also, the local youth club will exhibit a cultural performance or demonstrate a traditional game. During the guest stay, homestays provide village tours, souvenirs and handicrafts making and communal eating with the hosts (Pusiran & Xiao, 2013).

The number of homestays in Malaysia totals 193 clusters, with 3800 homestay operators involved and has generated RM27.7million in tourist receipts in 2016 (MOTAC, 2017). This component has grown at an average rate of 6% over the years 2007 to 2016 with a contribution of 0.03% of total tourism receipts in 2016 (Ahmad, Jabeen, & Khan, 2014; Che Leh, & Hamzah, 2012; Department of Statistic Malaysia, 2013; EPU,
The growth of the Malaysia homestay is depicted through the increase in tourist arrivals and receipts. This statistics over the years of 2006 to 2013 indicate positive growth with a plateau in 2014 and recovery from 2015 to 2016 as displayed in Table 1. The table also displays the proportions of domestic tourists that outweighs the international tourist. Domestic tourists comprise of students, local government agencies, and local tourists. Local tourists comprise of tourists visiting friends and families in the village to attend weddings and familiarization trips by homestay owners as organized by MOTAC. International tourists are foreign tourists’ groups as organized by MOTAC. International tourists originate from Singapore, Japan, China, Europe, Indonesia, Australia, USA, Korea and Taiwan (Bhuiyan, Siwar, & Ismail, 2013; MOTAC, 2015). However, despite the positive outlook of this tourism product to the Malaysian economy, past studies indicate the existence of institutional issues. These issues include the governance and leadership issues that could potentially contribute to the products’ decline in demand.

### 2 Literature Review

#### 2.1 Homestay Institutional Issues

The first institutional issues governance is defined as system or rules that administer the allocation of resources and exercising control and coordination (Bramwell & Lane, 2011). Homestays are governed and led by eight federal and state level bodies. These bodies independently provide continual funding, training, and marketing assistance (Pusiran & Xiao, 2013). At the homestay programs’ initial stage of inception, access to
funding and support from the government enabled the program to mature to its current stage. Regarding funding, three rounds of government funding were provided totaling RM40 million from 2006 to 2010. A second stimulus package of RM10 million was also allocated to upgrade the homes and the facilities offered. The third injection was from the Ministry of Rural and Regional Development totaling RM6.7 million for infrastructure development of the rural communities (Pusiran & Xiao, 2013). This support was intended to boost this tourism component to local and international tourists.

Unfortunately, most homestay operators became over-dependent on this continuous support from the government. Overdependence resulted in minimal leadership effort at the village level to become independent entrepreneurs (Kayat, 2008; 2010). Poor governance at the federal, state and village level also contributed to the homestay owner over-dependence (Kunjuraman & Hussin, 2017; Liu, 2006; Nor Ashikin & Kayat, 2010).

The registered homestay governing bodies comprise of federal, state and village level authorities as displayed in Figure 1. Planning is conducted by eight government agencies at the federal, state and local level. The federal level agencies includes the Homestay Association, federal Ministry of Culture, Art and Tourism (MOTAC), Tourism Malaysia - the promotion arm of MOTAC, Ministry of Rural and Regional Development (MRRD), and the training arm of MRRD called Institute for Rural Advancement (INFRA) and Ministry of Agriculture (MOA) and the Ministry of Health (Ahmad et al., 2014; Ibrahim & Razzaq, 2009). The state-level agencies are the 14 state MOTAC offices. The state-level MOTAC then provides a directive to the Homestay Chairman at the state level that collaborates with the Village Welfare and Security Committee (JKKK) or homestay hosts at the village level to implement the plans.

![Figure 1: Flowchart of Homestay Management in Malaysia](image)

Governance is also displayed through homestays registration. Figure 2 illustrates the administration of the registration process for the Malaysian homestays in the form of a flowchart.

![Flowchart of Homestay Registration Process](image)

*Figure 2: Flowchart of Homestay Registration Process
Source: MOTAC (2016)*

The process begins with registration with PKPKN or the state level MOTAC that reviews the application by the Homestay Guidelines prepared by the federal level MOTAC. This process is followed by inspections by the Ministry of Health, Tourism Malaysia, JKKK, and the State Homestay Association to determine compliance to four criteria’s namely; house location, availability of basic amenities, cleanliness, and insurance coverage. The homestay operators are also required to undertake the Rural Tourism (INFRA) basic training courses to pass the inspection by MOTAC, the Ministry of Health, and the Homestay Association of Malaysia. The training courses provide tourism and hospitality training educational awareness programs on ways to take advantage of the existing natural resources, cultural and heritage assets within the community to become a tourism product. Once these criteria’s and training requirements are fulfilled, then a homestay is fully registered. Much coordination and cooperation between the various government bodies and the federal and state bodies are required to develop this program.

The day to day local level governance of the homestays is through the Village Welfare and Security Committee (JKKK). The JKKK committee members would typically
constitute of the village head, the homestay owners and the residents who are responsible for planning, organizing and running the homestays. Once a homestay cluster is established, MOTAC encourages the JKKK to establish itself to register as a cooperative with the Malaysian Co-operatives Societies Commission for accountability.

After three years of operation, a compliance inspection is conducted by MOTAC (Ahmad et al., 2014). Similar registration and licensing processes were evident in homestays in Thailand, India, and Nepal. The tourism ministries in each country would establish standard and regulations before launching the homestay programs. Once the homestay is inspected for compliance, validation certificates are given for a period of two to three years before re-inspection (Kontogeorgopoulos et al., 2013; Government of India, 2014).

Homestay registration with the governing bodies is voluntary. Voluntary registration has created a scenario whereby unregistered homestay are allowed to co-exist alongside registered homestays. In the past, unregistered homestays were the cause of concern when unregistered homestay raises security issues for tourists. These claims have been reported in the local newspapers whereby the unregistered homestay operator breached the privacy of a tourist (Chan, 2014; Pusiran & Xiao, 2013). In response to this situation, MOTAC stated on its website stating the voluntary nature of homestay registration and that only registered homestays have to adhere to the guidelines enforced by MOTAC (MOTAC, 2014). No further legal action was taken against the unregistered operators. Governance and enforcement by MOTAC to make registration required by law increase the likelihood of safety and security concerns for tourists. Registration in Asian homestays are voluntary and contrast with agro-tourism operators in the US in the states of Dakota and Kansas that are required by law to register for limitation of liability and free promotion by the state governing bodies for five years (Abdullah & Sanusi, 2015). The governance of homestays in Malaysia is still at a stage of infancy. Tourism policies and laws governing homestays are limited as the homestays are governed by guidelines as opposed to laws with no legal implications for non-compliance (Abdullah & Sanusi, 2015).

The second institutional issue is the lack of leadership. Leadership in tourism differs from corporate leadership. Tourism leadership serves diverse communities with varying interest and is a process with the tangible result and intangible experiences (Valente, Dredge, & Lohmann, 2015). The criteria’s that determines successful tourism leaders includes the capacity to produce results, the capacity to mobilize followers, to articulation and communicate goals and actions, and to articulate the roles and responsibilities of self and team members (Valente, Dredge, & Lohmann, 2015). For example, successful homestay programs like Homestay Pelegong has leaders with high levels of commitment and strong coordination skills (Kayat, 2010). In contrary, a less successful homestay like Homestay Relau, Kedah lacked clear direction and proper management practices (Liu, 2006). Poor leadership and coordination within the JKKK committee reduce cohesiveness and the mobilization of the community to collectively
organize the entire homestay program (Pusiran & Xiao, 2013). Essentially, poor governance and leadership at the state and village level contribute to overdependence on the government, lack of homestay owner commitment and inexperience in the industry (Kunjuraman & Hussin, 2017; Nor Ashikin & Kayat, 2010; Liu, 2006).

Based on the institutional issues addressed, three institutional measures proposed are flexibility, self-organization, and power-sharing to determine the sustainability of the Malaysian homestay program. Flexibility, self-organization and power sharing have been adapted and adopted from Bramwell & Lane, (2011); Churugsa, McIntosh & Simmons, (2007) and Holladay & Powell, (2013); Kayat, (2008) and the Sustainable Tourism for Development Guidebook by UNWTO (2013). These three measures are closely related to the governance and leadership issues faced by the Malaysian homestays. Thus, this research intends to examine the significance of the relationship between the three measures and homestay sustainability. Firstly, the paper will describe the independent variables followed by the dependent variable and conceptual framework. It is then followed by an explanation of the research method used and an assessment of goodness of measures. The subsequent section will illustrate and discuss the data analysis, path analysis, and hypothesis testing. The final section will conclude the research with suggestions for future research.

2.2 Flexibility
The first construct used to measure the institutional dimension is flexibility. Flexibility is defined as governance structures that allow for learning and adaptive management for change (Holladay & Powell, 2013). The learning and adaptive management for change are applicable at all levels of governance, considering all the stakeholders’ involved. Flexibility in governance allows for change due to political context and the revision of lessons learned from past policies and legislation (Bramwell & Lane, 2011). Also, sustainable tourism policies are likely to be improved if there is flexibility. Thus, flexibility is used as an indicator in determining the flexibility of homestay planners, legislators, and regulator within the homestay program and their ability to work together and adjust quickly to changing problems.

2.3 Self-Organization
The second construct used to measure the institutional dimension is self-organization. Self-organization is local organizing behavior supported by legislation, funding, networks and collaborative learning (Holladay and Powell, 2013). The self-organizing process is the tourism development process as summarized by Churugsa et al. (2007) as the planning, legislation and regulation and coordination and cooperation by the government to achieve the tourism program’s objective. Thus, the components of planning, legislation, funding, coordination, and cooperation are essential for the self-organization indicator of the institutional dimension to determine homestay sustainability.
2.4 Power-sharing

The third construct used to measure the institutional dimension is power sharing. Power sharing is the joint decision making between the local, national and community user groups (Holladay & Powell, 2013). For example, within the Kampong Pelegong homestay, high power and authority lie within the Malaysian homestay program government officials, program committee members, homestay operators, guest, organizers, and operators (Kayat, 2008). Low power is assigned to the residents based on their interest in the homestay program. Power sharing or joint decision making as an indicator has limited past research and reviews.

2.5 Homestay Institutional Sustainability

Homestay institutional sustainability is defined as “the application of sustainable tourism to the homestay sub-component to minimise the negative institutional impact and maximise the positive institutional impact of homestay activities to meet the tourism development needs of the present tourism stakeholders without compromising the ability of future generations of tourism stakeholders’ to meet their own needs” (Butler, 1999; Weaver, 2006; World Commission on Economic Development [WCED], 1987). Homestay institutional sustainability is the dependent variable for this study is derived from the theory of development and the concept of sustainable tourism.

The theory of development focuses on human improvement processes that reduce the gaps between the rich and the poor globally. The concept of sustainable tourism is the application of the theory of development to the tourism industry. This concept holds a holistic view considering the four economic, institutional, environmental and sociocultural (EIES) dimensions in minimizing negative tourism impacts and maximizing positive tourism impacts for the future generation. However, for this research, focusing on institutional homestay issues. The institutional dimension comprises of the governance, management, system or rules that govern the allocation of resources and exercising control and coordination (Bramwell & Lane, 2011). The institutional impact is the governing policies at all levels of governance to protect the industry. The levels of governance are categorized into the international, national, and local level of governance (Bramwell & Lane, 2011; Hall, 2011).

International governance is determined through policy statements at the international level developed by organizations such as the UNEP, UNWTO, and WTTC designed to govern sustainable tourism at the international level. Policy solutions at the international level are characterized as spatial and temporal, highly complex and interrelated to macro-level issues (Hall, 2011). Examples of international scale policy solutions include international biodiversity conservation, emission reduction, and climate change conventions. The measurement of the international level policies is filtered down to the national governments to apply and implement within the country’s tourism industry. For example, the UNWTO’s sustainability 12 policy areas have been developed by UNEP and UNWTO and can be used by local governments to design and implement policies.
National level policies refer to national, federal, or regional government tourism policies or statements. In Malaysia, sustainable tourism is mentioned in the federal level government policy. These policies are documented in the Malaysian Development Plans by the Prime Minister’s Economic Planning Unit stating that Malaysia’s tourism policy thrust is ‘to achieve sustainable tourism growth to realize the full potential of employment and impact of income-generation at the national, state and local levels’ (EPU, 2013). The policy solution at the national level is characterized as routine policy management practice that is structured (Hall, 2011). Most policy planning at the national level is set on development and amendment of sustainability indicators and the implementation of policy and the review and redesign of a new set of goals as a learning process (Hall, 2011). For example, strategic policy planning carried out by the Australian Tourism Ministry at the national and state level incorporates the economic, institutional environmental and social tourism impacts (Moyle, Mclennan, Ruhanen, & Weiler, 2014).

At the local level, the policies are not as complex as at the international and national level. The local level policies are for routine management and day-to-day administration. Examples of the local level policy include environmental impact assessment, tourism development approvals, pollution licensing, and tourism industry regulations (Hall, 2011). According to Churugsa et al. (2007), local level tourism principles are related to three main areas where the government is involved in tourism development, namely, (1) planning; (2) legislation and regulation; and (3) coordination and co-operation.

Past efforts to measure the institutional dimension or governance within tourism has included measurement of flexibility, self-organization, local control, power-sharing and trust of tourism organizations (Holladay & Powell, 2013; Lang & Hallman as cited in Nunkoo & Ramkissoon, 2011, p.980). However, for this study, based on nature, size and the institutional issues faced has attributed to the lack of governance, suitable sustainability measures are flexibility, self-organization, and power sharing. These three measures will be able to determine the adaptability, planning, legislation coordination, and cooperation by the current homestays decision makers. The literature reviewed results in the development of the conceptual framework as displayed in Figure 3 below.

![Figure 3: Conceptual Framework](image-url)
Based on the conceptual framework above, this research tested the significance in the relationship between flexibility, self-organization, and power-sharing against homestay institutional sustainability.

3 Methodology

This study employed a quantitative research design. Data were collected from a total of 115 government officials within the four government agencies namely the Ministry of Tourism and Culture (MOTAC) at the federal and state level, the Institute for Rural Advancement (INFRA), the Homestay Association and Ministry of Rural and Regional Development (MRRD). Survey questionnaire technique was self-administered by the government officials. The survey questionnaire designed was adapted and adopted from Bramwell and Lane (2011); Churugsa et al. (2007); Holladay and Powell, (2013); Kayat (2008); and UNWTO Sustainable Tourism for Development Guidebook (UNWTO, 2013). The statements in the questionnaire were answered using a 5-point Likert scale. The questionnaire was administered to the government officials using convenience sampling.

The population size is 64 government officials directly related to the homestay program. The required minimum sample size totals 59 government officials determined through the use of G-power analysis tool (Hair, Hult, Ringle & Sarstedt, 2014). Power analysis is the assessment of the effect size for each regressing analysis using power tables created by Cohen (1988) or Green (as cited in Goodhue, Lewis & Thompson, 2012, p.982). To derive the minimum sample size, the alpha is set at 0.05, power at 0.8 and the number of predictors that affects the dependent variable is four independent variables. The result yields a minimum sample size of 59 samples intended for this research (Hair et al., 2014). Also, for structural equation modeling analysis, there are several rules of thumbs. The commonly used method is the “ten times rule” or “five times rule” which states that the sample size should be ten times or five times the number of incoming paths to the construct with most incoming paths (Chin & Newsted as cited in Goodhue et al., 2012, p.982). However, a sample of 115 government officials was collected from direct and indirectly related government officials.

The relationship was tested using PLS-SEM for this study as this study intends to test and confirm the concept of sustainability. In addition, the data that was collected was not normally distributed. PLS-SEM is flexible with no stringent rules regarding the requirement for multivariate normality of data, sample size, reflective constructs and strong theoretical knowledge about the model tested. These rules are not as stringent with the use of PLS-SEM (Valle & Assaker, 2016).

The data collected has missing values that are less than 20%. The missing data values are high in percentage and were rectified using the Expectation Maximization (EM) method. The EM method can accommodate both non-random and random missing
data processes and data with a high percentage of missing data. Also, it is also the best representation of the original distribution of values with the least amount of bias that ensures generalizability (Hair et al., 2010). In testing the goodness of measures, the validity and reliability of the questionnaire were tested. Construct validity is assessed through convergent and discriminant validity as reflected in the loadings in Table 1 and cross-loadings in Table 2.

Table 2: Convergent validity results of measurement model from the Government perspective

<table>
<thead>
<tr>
<th>Latent Variable</th>
<th>Indicators</th>
<th>Loadings</th>
<th>Indicator Reliability</th>
<th>Composite Reliability</th>
<th>AVE</th>
<th>Discriminant Validity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexibility</td>
<td>ID1</td>
<td>0.868</td>
<td>0.753</td>
<td>0.84</td>
<td>0.572</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>ID2</td>
<td>0.78</td>
<td>0.608</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ID3</td>
<td>0.734</td>
<td>0.584</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ID4</td>
<td>0.621</td>
<td>0.386</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Organization</td>
<td>ID5</td>
<td>0.755</td>
<td>0.57</td>
<td>0.87</td>
<td>0.572</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>ID6</td>
<td>0.797</td>
<td>0.653</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ID7</td>
<td>0.774</td>
<td>0.599</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ID8</td>
<td>0.665</td>
<td>0.442</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ID9</td>
<td>0.785</td>
<td>0.616</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power Sharing</td>
<td>ID12</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>Homestay</td>
<td>HS1</td>
<td>0.638</td>
<td>0.407</td>
<td>0.867</td>
<td>0.523</td>
<td>Yes</td>
</tr>
<tr>
<td>Sustainability</td>
<td>HS2</td>
<td>0.656</td>
<td>0.43</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HS3</td>
<td>0.785</td>
<td>0.616</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HS4</td>
<td>0.767</td>
<td>0.588</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HS7</td>
<td>0.685</td>
<td>0.469</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HS8</td>
<td>0.814</td>
<td>0.662</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The tests used to measure validity and reliability is the test of convergent validity, discriminant validity and constructs reliability. Convergent validity is the extent a measure correlates positively with alternative measures of the same construct (Hair et al. 2014) and is measured through the results of outer loading and average variance extracted (AVE). Table 2 above displays the results of convergent validity. The factor loadings for each item should be higher than 0.7 for validity to be acceptable. The loadings of 0.4 to 0.7 considered for removal if their removal increases the composite reliability (CR) above the threshold and the loading value of 0.4 to be considered for removal (Hair et al., 2014). The items in this study that had outer loading values below 0.5 were removed. These items were ID10, ID11, and ID13. As a result of items being removed, the average variance extracted (AVE) was above 0.5 suggesting the construct explains more than half of the variance of the indicators and on average fewer errors remains in the items than the variance explained by the construct (Hair et al. 2014). This indicates that the assessment of convergent validity results is statistically significant. The
AVE measures the variance captured by the indicators relative to the measurement error, and the recommended value should be greater than 0.5 to justify using a construct (Hair et al., 2014).

Discriminant validity is defined as the extent to which a construct is truly unique from other constructs by empirical standards. The cross-loadings results in Table 3 indicate the indicator’s outer loading is greater than the cross-loadings for all construct and discriminant validity is achieved. The Fornell-Larcker criterion results indicate that the calculated square root of the AVE exceeds the inter-correlations of the construct with the other constructs or the largest value is on the diagonals.

Table 3: Discriminant validity using the Fornell-Larcker criterion of first-order constructs from the Government perspective

<table>
<thead>
<tr>
<th>Construct</th>
<th>Flexibility</th>
<th>Homestay Sustainability</th>
<th>Power Sharing</th>
<th>Self-Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexibility</td>
<td>0.756</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homestay Sustainability</td>
<td>0.667</td>
<td>0.723</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power Sharing</td>
<td>0.188</td>
<td>0.39</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Self-Organization</td>
<td>0.67</td>
<td>0.722</td>
<td>0.325</td>
<td>0.757</td>
</tr>
</tbody>
</table>

Reliability is the consistency of the instrument used in the event the instrument is re-used to a homogeneous group of respondents. The two measures that can be used to measure reliability are Cronbach’s alpha and composite reliability (CR). Cronbach’s alpha assumes all indicators are equally reliable and have equal outer loadings on the construct. In addition, Cronbach’s alpha is sensitive to the number of items in the scale and tends to underestimate the internal consistency reliability (Hair et al. 2014). The Cronbach’s alpha as reflected in Table 4 below, suggests that the constructs are reliable and consistent.

Table 4: Construct reliability

<table>
<thead>
<tr>
<th>Construct</th>
<th>Number of Items</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexibility</td>
<td>4</td>
<td>0.751</td>
</tr>
<tr>
<td>Self-Organization</td>
<td>5</td>
<td>0.813</td>
</tr>
<tr>
<td>Power sharing</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Homestay Sustainability</td>
<td>6</td>
<td>0.814</td>
</tr>
</tbody>
</table>

The results of Cronbach’s alpha is above 0.6 which indicates that an acceptable level of reliability (Hair et al. 2014). The assessment of validity and reliability of the data collected suggest significant validity and acceptable reliability. Next, the data collected was analyzed using SEM-PLS.
4 Findings

The research hypothesis has been developed based on the problems identified and research question. Structural Equation Modeling (SEM) was employed to examine the significance of the following hypothesis:

H₁: There is a significant positive relationship between flexibility and homestay sustainability
H₂: There is a significant positive relationship between self-organization and homestay sustainability
H₃: There is a significant positive relationship between power sharing and homestay sustainability.

The path analysis is used to test the hypotheses. Figure 5 represents the assessment of the structural model from the homeowners’ perspective. The PLS-SEM structural model results for homestay owner groups results in an R² value of 0.612 suggesting that the institutional dimension indicators explain 61.2% of the variance in homestay sustainability.

A closer look suggests that from the government officials’ perspective, as reflected in Table 5 that presents the relationship between flexibility and homestay sustainability has shown a significant relationship (β= 0.33, p<0.01). Thus the H₁ of the study was significant and supported. This means that the government officials agree that flexibility is important for homestays to be sustainable. The stronger the relationship, the higher the likelihood of homestays being sustainable. The second hypothesis, H₂ tests the
The relationship between self-organization and homestay sustainability depicts a significant relationship from the government officials perspective ($\beta = 0.178$, p<0.01). The third and final hypothesis, $H_3$ tests the significance in the relationship between power sharing and homestay sustainability indicates significance as well ($\beta = 0.45$, p<0.01). Thus, all three measures of institutional sustainability are significant in a relationship with homestay sustainability.

### Table 5: Path coefficients and hypothesis testing for Government Officials

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Relationship</th>
<th>Beta ($\beta$)</th>
<th>Standard error</th>
<th>t-value</th>
<th>Decision</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>FL $\rightarrow$ HS</td>
<td>0.33</td>
<td>0.093</td>
<td>3.66</td>
<td>Yes</td>
<td>0.612</td>
</tr>
<tr>
<td>H2</td>
<td>SO $\rightarrow$ HS</td>
<td>0.178</td>
<td>0.068</td>
<td>4.706</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>H3</td>
<td>PS $\rightarrow$ HS</td>
<td>0.45</td>
<td>0.092</td>
<td>2.72</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Test of significance at *** p<0.01, t-value is greater than 2.33*

The relationship between the three measures of the institutional dimension and homestay sustainability using PLS-SEM indicates that the result from the perspective of the government was able to show significant results. Findings suggest that government flexibility and adaptability to change is important for the Malaysian homestays. Secondly, findings by Chursuga et al., (2007) and Kayat (2008) concurs with the findings of this study that self-organization regarding planning, legislation, funding, coordination, and cooperation will continue to ensure the continued achievement of the homestay objectives. Finally, power-sharing amongst all the stakeholders regarding decision-making and implementation will ensure program sustenance and continuity into the next generation. Past findings on the stakeholder power by Kayat (2008) supports these study findings that the government, homestay committee, and homestay owners possess high power, dependence and stakes in the homestay programs. The government has high power as the role of the government is to promote the product to the local and international tourist and to provide the necessary funding to the homestay operators.

### 5 Conclusion

The significance of the relationship between the institutional dimension and homestay sustainability indicates that the Malaysian homestay program is a sustainable program. The governing and leadership issues that have been raised in past literature and are used as a measure of institutional sustainability in this study. These findings of are unique and add to the current literature on homestays and tourism sustainability. There is limited research that corroborates with the results of this research. Further comparative research between the Malaysian homestay program and the homestay programs in a developed economy like the United Kingdom in terms of institutional
sustainability would broaden insights into governance and leadership issues addressed within this research.

6 References


